Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

O-76 11:30 AM Monday, October 18, 2021

CHANGING GENDER DISPARITY GAP OVER TIME WITH REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY PHYSICIANS:AN SREI REPORT. Laurel Stadtmauer, MD, PhD,[1] Seifeldin Sadek, MD,[2] Kevin S. Richter, PhD,[3] Paula Amato, MD,[4] Bradley S. Hurst, MD[5] [1]Eastern Virginia Medical School; [2]Eastern Virginia Medical School, Norfolk, VA; [3]Fertility Science Consulting, Silver Spring, MD; [4]Oregon Health & Science University, Portland, OR; [5]Atrium Health Carolinas Medical Center, Charlotte, NC.

OBJECTIVE: To identify changes in current practice patterns, salaries, satisfaction by gender and by years in practice among board-certified reproductive endocrinology and infertility (REI) subspecialties

MATERIALS AND METHODS: Cross-sectional Web based survey including 37 questions sent to members of SREI in the fourth quarter of 2019. The primary outcome measure was the changes over time in total compensation and practice patterns comparing gender and type of practice. Statistics included chi-square analysis, Student's *t*-test, ANOVA and ANCOVA as appropriate. For quantitative analysis of non-numerical Likert scale responses, data were transformed into numerical values.

RESULTS: 370 respondents included 179 (48.4%) females, 190 (51.4%) males. The percentage of females responding to this survey was more than ten points greater than that of female respondents (38.1%) to a similar survey of reproductive endocrinologists conducted six years earlier (27% relative increase, $p = 0.005$, χ^2). (1) Females were more common than males among reproductive endocrinologists aged 50 years or younger, and outnumbered males by more than 3 to 1 among respondents 40 years or younger. In contrast, the majority of SREI members aged 51 years or greater were male, increasing to 85% male among those above the age of 65 years. Women comprised a significantly larger proportion of REIs in academic positions (59%) compared to both private group practice (44%, $p = 0.0084$, χ^2) and solo practice (26%, $p = 0.0062$, χ^2).

There was a marginally significant trend toward lower compensation for female compared to male REIs (17% lower, $472,807 vs $571,969, $p = 0.085$, t-test).The gap was seen with ten years of experience or greater, which is also when there was the highest salaries and largest gap between private and academic. (10 to 14 years: $1,166,667 vs $447,632, $p < 0.0001$; 15 to 20 years: $790,625 vs $392,778, $p = 0.17$; greater than 20 years: $768,383 vs $368,723, $p = 0.0008$, t-test). Stratification by the number of years in practice revealed that annual compensation was very similar between private groups and academic settings among the least experienced REIs in practice for less than five years ($318,750 vs $343,000, $p = 0.44$, t-test). With five to nine years of experience, REIs in private group practice earned 39% more than those in an academic practice ($483,333 vs $346,786, $p = 0.012$, t-test).

Most felt very positively (35%) or somewhat positively (42%) about the current state of the reproductive endocrinology field and were very optimistic (36%) or somewhat optimistic (39%) about the future of the field and over 90% would choose the subspecialty again. However, females in academics had slightly lower satisfaction, which may correlate with the lower salaries in academics.

CONCLUSIONS: The upcoming generation of female physicians outnumber men, have less disparity in compensation and the gap appears to be closing. There is a large gap in compensation between private and academic practices at 5 years and greater experience. REI remains high morale specialty.

IMPACT STATEMENT: Gender discrimination in compensation appears to be improving in younger REIs.

Reference

1. Barnhart KT, Nakajima ST, Puscheck E, Price TM, Baker VL, Segars J. Practice patterns, satisfaction, and demographics of reproductive endocrinologists: results of the 2014 Society for Reproductive Endocrinology and Infertility Workforce Survey. Fertil Steril. 2016;105(5):1281–6.

SUPPORT: Supported by SREI

O-77 11:45 AM Monday, October 18, 2021

TELEHEALTH PROVIDER EXPERIENCE IN REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY CLINICS DURING THE COVID-19 PANDEMIC AND BEYOND. Elizabeth A. Dilday, M.D.,[1] Zain Al-Safi, MD,[2] Christopher R. Douglas, MD, MS[2] [1]Department of Obstetrics and Gynecology, Division of Reproductive Endocrinology and Infertility, University of California, Los Angeles, Los Angeles, CA; [2]University of California, Los Angeles, Los Angeles, CA.

OBJECTIVE: To assess Telehealth services offered by Society for Assisted Reproductive Technology (SART) member clinics and provider experiences with incorporating Telehealth into reproductive endocrinology and infertility practices.

MATERIALS AND METHODS: A 16-question web-based survey on use of Telehealth was distributed to SART member reproductive endocrinology and infertility clinics. Clinic demographic data, Telehealth descriptive data and provider satisfaction with use of Telehealth were assessed. Results were collected via Survey Monkey.

RESULTS: A total of 330 SART clinics were reached via email. 38 clinics responded (11.5%), representing 17 unique states, with California, New York, and Illinois most commonly represented. 22 clinics (59.5%) were private, 12 (32.4%) were university-affiliated and 3 (8.11%) were health system-based. 25 clinics (67.6%) were described as suburban and 12 (32.4%) were urban. All 38 clinics surveyed offer Telehealth visits. The most common Telehealth platform was Zoom (58.6%), followed by use of telephone or landline (41.4%), and Telehealth service through electronic medical platform (31%). New patient consultations and return visits were offered by 36 (94.7%) and 35 (92.1%) of clinics, respectively. The most common types of consultations offered were related to fertility (100%), reproductive endocrinology (94.7%) and reproductive surgery (73.7%). Only 13 clinics (34.2%) offered Telehealth services before the COVID-19 pandemic; most of these clinics estimated that 25-50% of visits were done via Telehealth before the pandemic. Half of the clinics estimated that >75% of visits were done via Telehealth during the pandemic. The majority of clinics (89.5%) anticipate they will offer Telehealth visits after the COVID-19 pandemic. 63.2% of clinics anticipate fewer Telehealth visits after the pandemic because of logistics (28.6%) and patient preference (25.7%). Most providers (73.7%) stated that they are "very satisfied" with Telehealth overall.

CONCLUSIONS: Telehealth enabled safe patient-provider interactions throughout the COVID-19 pandemic for all clinics that responded to this survey, most commonly performed via Zoom. While only few clinics offered Telehealth services before COVID-19, the majority of clinics anticipate that they will continue to offer Telehealth after the pandemic. There is ongoing research assessing patient satisfaction with Telehealth, and future research can focus on ways to overcome logistical issues to widen use of a service that is considered satisfactory for providers and patients alike.

IMPACT STATEMENT: Telehealth is a method of care delivery that reduces risk of cross-contamination caused by close contact (1), critical during pandemics and convenient under other routine circumstances as well. All clinics surveyed used Telehealth during the COVID-19 pandemic. Most providers express great satisfaction with Telehealth and anticipate they will offer Telehealth services henceforth.

Reference

1. Smith AC, Thomas E, Snoswell CL, et al. Telehealth for global emergencies: Implications for coronavirus disease 2019 (COVID-19). *J Telemed Telecare*. 2020;26(5):309-313. https://doi.org/10.1177/1357633X20916567

SUPPORT: None.

O-78 12:00 PM Monday, October 18, 2021

PATIENT SATISFACTION WITH TELEMEDICINE VISITS FOR REPRODUCTIVE ENDOCRINOLOGY PATIENTS IN THE ERA OF COVID-19. Kelsey L. Anderson, MD,[1] Reyan Coskun, BS,[2] Caitlin Elizabeth Martin, MD, MS,[3] Patricia T. Jimenez, MD,[4] Kenan Omurtag, MD[5] [1]Washington University School of Medicine, St. Louis, MO; [2]Washington University School of Medicine; [3]Washington University in St Louis, ST Louis, MO; [4]Washington University in St. Louis, Saint Louis, MO; [5]Washington University St Louis School of Medicine, St. Louis, MO.

OBJECTIVE: Due to the COVID-19 pandemic, video-based telemedicine visits have become the standard in many clinical practices. Many reproductive endocrinology consultations do not require a physical exam, allowing for integration of telemedicine. The purpose of this study is to evaluate patient satisfaction with telemedicine visits in the Reproductive Endocrinology and Infertility (REI) office.

MATERIALS AND METHODS: This is a prospective cross-sectional study that includes any person undergoing a new patient visit at Washington University's Reproductive Endocrinology clinic from March 1st-April 20th

2021. After the visit, patients were contacted via telephone to obtain consent to participate in an online one-time research survey. A link was sent to their email with the survey through RedCap secure web application. The survey is 25 questions which includes the telehealth usability questionnaire (TUQ) survey, a previously published tool to evaluate usability and quality of telehealth interaction, along with questions specific to the REI clinic and the participation of learners during visits. Baseline patient demographics including age, race/ethnicity, BMI, distance from clinic, and recommended treatment were collected.

RESULTS: 117 participants were contacted, 78% (n=91) agreed to participate in the study, and 45% (n=41) completed the survey. There were no significant differences in age, BMI, distance from clinic or length of infertility with response to survey. 92.5% responders would use telemedicine services again and were satisfied with the telehealth system. Telehealth improved access to healthcare for 82.5% and travel time for 95%. The mean distance from clinic was 76 miles, and there was no significance difference in satisfaction with telemedicine services (p=0.46) or perceived access to healthcare services (p= 0.43) between those living closer or further than 76 miles. Those living further also had no preference for telemedicine visits over in person visits (p=0.134).

CONCLUSIONS: In the era of COVID-19, healthcare implementation has dramatically changed with a drastic increase in telemedicine services. Based on our survey, majority of patients were satisfied with telemedicine visits and believed it saved travel time while improving access to REI care. Despite no differences in patient preference for in person versus telemedicine depending on their distance from clinic, this finding is reassuring because patients are satisfied with telemedicine for reasons other than distance from clinic.

IMPACT STATEMENT: Patient satisfaction surveys demonstrate the feasibility of using telemedicine services for new-patient visits to provide quality care to patients who perceive telemedicine similar to in-person visits. Given the wide acceptance of telemedicine, reimbursement by insurance companies should continue when the pandemic is over.

PREIMPLANTATION GENETIC TESTING 1

O-79 10:45 AM Monday, October 18, 2021

TRANSFER OF MOSAIC EMBRYOS RESULT IN ONGOING PREGNANCY AND LIVE BIRTH OF HEALTHY BABIES. Mitko Madjunkov, M.D,[1] Hanna Balakier, PHD,[1] Rina Abramov, MSc,[2] Ran Antes, PhD,[2] Siwei Chen, MD,[3] Svetlana Madjunkova, MD, PhD,[1] Clifford Lawrence Librach, MD[1] [1]CReATe Fertility Centre, Toronto, ON, Canada; [2]CReATe fertility centre, Toronto, ON, Canada; [3]Create Fertility Centre, Toronto, ON, Canada.

OBJECTIVE: The objective of our study was to assess the implantation, pregnancy and birth outcomes after mosaic embryo transfer, and the impact of the level of mosaicism and type of chromosomal aberrations on the outcome. The current recommendation is to consider mosaic embryos for transfer if no euploid embryos are available. Evidence is limited on the developmental potential, implantation and birth outcomes of mosaic embryos.

MATERIALS AND METHODS: This is a single centre retrospective cohort study reviewing 279 single mosaic embryo transfers from January 2015-December 2020. 74 of them were previously diagnosed as euploid using aCGH but classified as mosaic upon re-analysis with NGS at a later date, while 205 were diagnosed as mosaic with NGS prior to embryo transfer (ET). NGS analysis was performed using VeriSeq (Illumina) kits with BlueFuse software. The sensitivity for mosaicism detection was established at 20%, and aberrations considered clinically relevant were ≥10Mb in size and with ≥25% mosaicism.

RESULTS: Of the 279 transferred mosaic embryos, 80.6% had mosaicism levels ≥25%-<50% (Group 1)(69.7% were segmental mosaics (SM) with gain-SG/loss-SL, 30.2% whole chromosome mosaics (WCM) gain-WCG/loss-WCL) and 19.4% had mosaisicm levels of ≥50-<70% (Group 2) (70.3% with SM and 29.7% with WCM).

The overall implantation rate for mosaic embryos was 52.3%. There was no statistical difference in implantation rate ((IR) 54.6% vs 42.6%), ongoing pregnancy rate ((OPR) 39.3% vs 29.3%), or miscarriage rate ((MR) 10.4% vs 9.25%) between Group 1 and Group 2 embryos, respectively.

88.5% of the ongoing pregnancies were from embryos were SM (56.6% SL, 22.4% SG, 21% complex SG/SL), while the rest 11.5% were WCM (40% WCG, 20% WCL and 40% complex WCG/WCL). SM embryos in Group 2 have significantly increased ongoing pregnancy rate compared to WCM embryos in Group 2 (36.8% vs. 12.5% p=0.048).

Group 2 WCM embryos had higher MR compared to Group 1 WCM (6.6% vs. 25%, p=0.047) with a similar distribution of WCG/WCL. Group 1 WCM monosomy embryos had lower IR compared to Group 1 WCM trisomy (p=0.039, 18/10 (55.5%) vs. 6/14 42.8%). There was no outcome prediction based on the specific chromosome involved in the SA but a larger sample size is required to evaluate this further. Healthy babies were delivered from 72 available birth outcomes.

CONCLUSIONS: Our findings provide evidence that the majority of mosaic embryos that implant will develop into ongoing pregnancies and healthy live births. This supports the hypothesis that low level mosaicism in early embryonic development may be a physiological phenomena. Further studies are needed to fully determine the impact of specific mosaic chromosomal aberrations on pregnancy and birth outcomes.

IMPACT STATEMENT: Mosaic embryos have considerable implantation and developmental potential. The type and level of chromosomal aberrations may impact implantation and miscarriage rates for mosaic embryos. Our report strengthens already encouraging data on mosaic embryo transfer and can aid proper patient counselling and decision-making.

O-80 11:00 AM Monday, October 18, 2021

PREIMPLANTATION GENETIC TESTING FOR ANEUPLOIDY USING NEXT GENERATION SEQUENCING IS SUPERIOR TO CONVENTIONAL IVF IN 35 YEARS OR OLDER PATIENTS. Papri Sarkar, MD,[1] Erika P. New, MD, MPH,[1] Rachel Grimes Sprague, MD,[1] Samad Jahandideh, PhD,[2] Kate Devine, MD,[2] Anthony N. Imudia, MD[1] [1]University of South Florida, Tampa, FL; [2]Shady Grove Fertility, Washington D.C., DC.

OBJECTIVE: The technique and platform used for preimplantation genetic testing for aneuploidy (PGT-A) has undergone rapid changes over time leading to variable results. Hence, we sought to investigate the role of PGT-A in improving pregnancy outcomes in a large IVF population in which next generation sequencing (NGS) was exclusively utilized across all laboratories.

MATERIALS AND METHODS: In this retrospective cohort study we included all autologous IVF cycles with or without PGT-A followed by a subsequent single frozen embryo transfer (FET) performed at SGFertility between January 2017 to July 2020. Live birth/ongoing pregnancy (LBR) per transfer, clinical pregnancy (CPR), and miscarriage rates were compared between PGT-A tested and untested cycles. Generalized estimating equation (GEE) was used to analyse the correlation between PGT-A testing and selected outcomes (reference group: non PGT-A).

RESULTS: Compared to the PGT-A group, patients without PGT-A were 2 years younger (34.1±3.9 vs 36.2±3.8, p<0.001) with a higher AMH serum concentration (4.7±5.2 vs 3.9±4.2, p<0.001) but similar AFC. Overall, LBR and CPR were significantly higher in patients who underwent FET with a PGT-A tested embryo vs untested embryo (See table). Similarly, the miscarriage rate was significantly lower after PGT-A compared with the non PGT-A

Age groups	CPR Non PGT-A (n= 7128)	CPR PGT-A (n=9014)	CPR p- value	MR non PGT-A (n=7128)	MR PGT-A (n=9014)	MR p value	LBR/OPR PGT-A (n= 7128)	LBR/OPR PGT-A (n=9014)	LBR/OPR p value
All ages	4019 (56.4%)	5485 (60.8%)	<0.001	885 (12.4%)	908 (10.1%)	<0.001	3043 (42.7%)	4410 (49%)	0.0010
<35 years old	2359 (60%)	1788 (61%)	0.4	525 (22%)	337 (19%)	0.008	1817 (46%)	1413 (48%)	0.09
35-37 years old	1051 (56%)	1628 (61%)	<0.001	233 (22%)	274 (17%)	<0.001	811 (43%)	1332 (50%)	<0.001
38-40 years	426 (46%)	1360 (60%)	<0.001	110 (26%)	240 (18%)	<0.001	309 (36%)	1114 (49%)	<0.001
>40 years	170 (42%)	679 (59%)	<0.001	63 (15%)	125 (9%)	<0.001	106 (26%)	551 (48%)	<0.001